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EXAMINER VETTER, DANIEL				
ART UNIT 3628		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

Office Action Summary

Application No.

10/714,525

Applicant(s)

MARCKEN ET AL.

Examiner

DANIEL P. VETTER

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-76 is/are pending in the application.
- 4a) Of the above claim(s) 1-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-76 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Status of the Claims

1. Claims 1-76 were previously pending in this application. Claims 1, 5, 17 were amended in the reply filed March 21, 2008. Claims 1-76 are currently pending in this application.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 21, 2008 has been entered.

Election/Restrictions

3. Applicant's election with traverse of Claims 21-62 in the reply filed on July 29, 2008 is acknowledged. The traversal is on the ground(s) that the requirement is untimely and improper. The argument that the requirement is untimely because the restriction was not made before final action is not found persuasive because the finality of the previous Office Action was removed after the filing of a Request for Continued Examination on March 31, 2008. The argument that the requirement is improper is also unpersuasive. Applicant argues that examiner has not shown that the inventions are independent and distinct, and instead has only addressed the distinctness of the inventions. Remarks, 4. However, a restriction may still be proper if the inventions are related and therefore not independent, so long as they are distinct from one another. See MPEP § 802.01 (discussing the meaning of "independent" and "distinct" as well as the legislative history of 35 U.S.C. § 121). Applicant also disputes the purported distinctness set forth in the restriction requirement. The Remarks do not assert that the inventions overlap in scope or are obvious variants, only that the inventions are not

separately usable. However, only conclusory statements are provided to that effect. Applicant does not provide evidence or rationale that the separate utilities set forth in the requirement as the reasons for distinctness are present in the other distinct inventions. Applicant finally argues that a burden is not present on the Office to continue examining all 76 claims presented in the application. Examiner respectfully disagrees and maintains that a serious burden in this application warrants restriction. The divergent subject matter of the inventions would require different search strategies to discover the most applicable art. A restriction in this case serves the purpose of avoiding deviating paths of rejections during prosecution. The different inventions are also likely to raise different issues under §§ 101 and 112, regardless of their respective classification.

Nevertheless, upon reconsideration the requirement is removed only as to the distinctness between invention II (claims 21-62) and invention III (claims 63-76). Claims 63-76 are accordingly examined below along with the elected invention II. However, regarding the distinctness of invention I (claims 1-20), the requirement is still deemed proper and is therefore made FINAL. Claims 1-20 are hereby withdrawn as being directed to a non-elected invention.

Response to Arguments

4. Applicant's amendments overcome the rejections made under § 112, second paragraph, and they are withdrawn.
5. Applicant's arguments with respect to the rejections made under §§ 102(b) and 103(a) have been fully considered but they are not persuasive. Examiner respectfully disagrees with applicant's arguments that Jones is not sufficient to teach determining constraints. Constraints can include user search query restrictions such as time, origin, and destination (Specification, ¶ 0028). These are the same as the constraints disclosed in Jones (¶ 0037). Constraints are also derived from a routing, and the constraints must be satisfied in a proper itinerary (Specification, ¶ 0027). Jones describes a similar use of constraints derived from routings, such as one that excludes

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certain connections such as a flight from Dallas to Chicago with a layover in Cairo, Egypt (§ 0037). These constraints are also derived from fare properties and rules, as required by the base claims (§ 0048, "Step 306 may be implemented by querying the fare portion of the relational database for rules and restrictions related to the best fares."). The claims now also require generating additional itineraries without considering the constraints (e.g., claim 36). This is also taught by Jones, wherein the system generates additional itineraries without the previous constraints on airlines (§ 0060). Accordingly, the rejections are maintained.

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 57-62 and 68-76 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.
8. Claims 57-62 and 68-76 are directed to a series of steps. In order for a series of steps to be considered a proper process under § 101, a claimed process should either: (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials). *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972). Thus, to qualify as patent eligible, these processes must positively recite the other statutory class to which it is tied (e.g., by identifying the apparatus that accomplishes the method steps), or positively recite the subject matter that is being transformed (e.g., by identifying the product or material that is changed to a different state). The claims do not recite any specific computerized or mechanical apparatus used to perform itinerary generation and pricing. And while the claimed invention is related to actual travel itineraries, no step is actually implemented to affect a physical transformation in the real world, only abstract determinations. As such, the claims concretely identify neither the apparatus performing the recited steps nor any

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transformation of underlying materials, and accordingly are directed to non-statutory subject matter.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

10. Claims 37 and 40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

11. Claim 37 recites the limitation "the itineraries generated without considering the constraints" in line 4. There is insufficient antecedent basis for this limitation in the claim. Base claim 21 only provides antecedent basis for itineraries generated considering the constraints.

12. Claim 40 recites the limitation "the itineraries generated without considering the constraints and with considering the constraints" in lines 4-5. There is insufficient antecedent basis for this limitation in the claim. Individual itineraries are previously recited as being generated considering the constraints and without considering the constraints, and this limitation appears to refer to both as simply "the itineraries." It is therefore unclear if this limitation includes all previously recited itineraries. If it does, it is unclear as to why the itineraries generated considering the constraints are being priced, as they were already priced in the base claim 21.

Claim Rejections - 35 USC § 102

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

14. Claims 21-28, 32, 34-46, 51-55, 57-61, and 63-76 are rejected under 35 U.S.C. 102(b) as being anticipated by Jones, et al., U.S. Pat. Pub. No. 2002/0111935.

As per claim 21.

Jones et al ('935) discloses:

receiving trip segments, see figure 3 (300);

determining constraints on sequences of flights between the endpoints of the trip segments, the constraints derived from properties of fares that can be used with the flights, see (302), (306);

generating itineraries from flights using the constraints, see (310); and

pricing the itineraries, see figure 6 (600).

As per claims 22, 42, 52, 58.

Jones et al ('935) further discloses the constraints are on flights, see figure 5 (Flights).

As per claims 23, 43, 53, 59.

Jones et al ('935) further discloses the constraints are on itineraries, see paragraph (0017).

As per claims 24, 44, 54.

Jones et al ('935) further discloses the fares are fares between endpoints of trip segments, see figure 6 (LAX to MIA, USD 338.00, American Airlines offers non-stop service and connecting service).

As per claims 25, 45, 55.

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Jones et al ('935) further discloses fares are fares between points connected by single flights to endpoints of trip segments, see figure 6 (LAX to MIA, USD 338.00, American Airlines offers non-stop service and connecting service).

As per claim 26.

Jones et al ('935) further discloses itineraries for a complete trip, see (0017) and 6 (LAX to MIA, USD 338.00, American Airlines offers non-stop service and connecting service).

As per claim 27.

Jones et al ('935) further discloses providing itineraries for each trip segment, see (0017) and 6 (LAX to MIA, USD 338.00, American Airlines offers non-stop service and connecting service).

As per claims 28, 46, 60.

Jones et al ('935) further discloses the constraints are fare routings, see figure 5 (LAX to MIA) and (0037) and (0043).

As per claims 32, 61.

Jones et al ('935) further discloses the constraints are restrictions on individual flights, see (0037) and (0043).

As per claim 34.

Jones et al ('935) further discloses the constraints are restrictions on origin and destination, see (0037) and (0043).

As per claim 35.

Jones et al ('935) further discloses the constraints based on price, see figure 3 (308).

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As per claim 36.

Jones et al ('935) further discloses generating additional itineraries without considering the constraints, (0060).

As per claim 37.

Jones et al ('935) further discloses pricing of itineraries without considering constraints, and returning priced itineraries, (0060).

As per claim 38.

Jones et al ('935) further discloses restricting pricing of itineraries based on constraints used to produce the itineraries, see figure 3 (306).

As per claim 39.

Jones et al ('935) further discloses restricting pricing of itineraries is based restrictions on the endpoints of fares considered during pricing, see figure 3 (310).

As per claim 40.

Jones et al ('935) further discloses generating additional itineraries without considering the constraints (0060) pricing the itineraries from flights without considering the constraints and with considering the constraints and returning priced itineraries, see figure 3 (302), (306), (318); (0060)

As per claim 41.

Jones et al ('935) discloses:

a processor, see figure 1 (12) and (0035);

a memory for executing a computer program product, see (16);

receive trip segments, see figure 3 (300);

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determine constraints on sequences of flights between the endpoints of the trip segments, the constraints derived from properties of fares that can be used with the flights, see (302), (306);

generate itineraries from flights using the constraints, see (310); and
price the itineraries, see figure 6 (600).

As per claim 51.

Jones et al ('935) discloses:

a computer program product, see (0035);

receive trip segments, see figure 3 (300);

determine geographic and airline constraints derived from fare rules to control the manner in which flights are combined prior to evaluation of fare rules, see (302), (306);

generate itineraries from flights using the constraints, see (318).

As per claim 57.

Jones et al ('935) discloses:

receiving trip segments, see figure 3 (300);

determining geographic and airline constraints derived from fare rules to control the manner in which flights are combined prior to evaluation of fare rules, see (302), (306);

generating itineraries from flights using the constraints, see (318).

As per claim 63.

Jones et al ('935) discloses:

a computer program product, see (0035);

receive trip segments, see figure 3 (300);

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determine constraints on sequences of flights between the endpoints of the trip segments, the constraints derived from properties of fares that can be used with the flights, see (302), (306), (323);

generate itineraries constrained by multiple constraints that are derived from a diverse set of fares, see (310); and

return at least some of the generated itineraries to the user, see (318).

As per claims 64, 69.

Jones et al ('935) further discloses multiple airlines, see figure 3 (303).

As per claims 65, 70.

Jones et al ('935) further discloses multiple origins, see figure 6 (connecting service) and multi-airport cities (0039).

As per claims 66, 71.

Jones et al ('935) further discloses multiple destinations, see figure 6 (connecting service) and multi-airport cities (0039).

As per claims 67, 72.

Jones et al ('935) further discloses multiple origin-destination pairs, see figure 6 (connecting service) and multi-airport cities (0039).

As per claim 68.

Jones et al ('935) discloses:

receiving trip segments, see figure 3 (300);

determining constraints on sequences of flights between the endpoints of the trip segments, the constraints derived from properties of fares that can be used with the flights, see (302), (306), (323);

generating itineraries constrained by multiple constraints that are derived from a diverse set of fares, see (310); and
returning at least some of the generated itineraries to the user, see (318).

As per claim 73.

Jones et al ('935) further discloses fares are filtered based on properties of the fare rules, see figure 3 (308).

As per claim 74.

Jones et al ('935) further discloses fares fail if aspects of the fare's rules are violated, see figure 3 (308).

As per claim 75.

Jones et al ('935) further discloses aspects of the fare's rules are effective and discontinue dates, see (0048).

As per claim 76.

Jones et al ('935) further discloses aspects of the fare's rules limit at least one of travel dates and travel times, see (0048).

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 29, 33, 47, 50, 56, 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones, et al. (2002/0111935) in view of Tanner (WO 01/59590).

As per claim 29, 47.

Jones et al ('935) discloses carrier schedule data as raw schedule data and choosing among carriers, see (0039) and figure 3 (303), but does not disclose the constraints are fare carrier

Tanner ('590) teaches the constraints are fare carrier, see figure 1 (Airline: All) for the benefit of giving the customer the choice to limit the search to a preferred airline.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to allow one constraint to be fare carrier for the benefit of giving the customer the choice to limit the search to a preferred airline.

As per claim 33, 50, 56, 62.

Jones et al ('935) discloses origin and destination, see figure 5 (504 and 506), and carrier schedule data as raw schedule data, see (0039) and choosing among carriers, see (0039) and figure 3 (303), but does not disclose the constraints on airline, and origin and destination triples.

Tanner ('590) teaches the constraints are fare carrier, see figure 1 (Airline: All) for the benefit of giving the customer the choice to limit the search to a preferred airline.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to allow one constraint to be fare carrier for the benefit of giving the customer the choice to limit the search to a preferred airline.

17. Claims 30 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al (2002/0111935) in view of Official notice considered admitted prior art.

As per claim 30 and 48.

Jones et al ('935) does not disclose the constraints based on global fare indicator.

Official Notice was taken and considered admitted prior art that it is old and well known in the travel arts to add a new airline product to increase offerings to customers.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to price according to maximum permitted mileage to adapt to the changing offerings in the marketplace.

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18. Claims 31 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al (2002/0111935) in view of the Travel Gazette.

As per claims 31 and 49.

Jones et al ('935) does not disclose the constraints based on fare maximum permitted mileage.

The Travel Gazette teaches pricing according to maximum permitted mileage as a new airline product to increase offerings to customers.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to price according to maximum permitted mileage to adapt to the changing offerings in the marketplace.

Conclusion

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL P. VETTER whose telephone number is (571)270-1366. The examiner can normally be reached on Monday through Thursday from 8am to 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hayes can be reached on (571) 272-6708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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/JOHN W HAYES/
Supervisory Patent Examiner, Art Unit 3628